

## Introduction how to do Unit testing with Google Test

### A. REQUIREMENTS

Base requirements to build and use Google Test from a source package

- C++ standard compliant compiler
- Babel or Cmake. (sudo apt-get install cmake)

### B. STEPS

1. Open Putty (take SSH connection) terminal or any similar Linux environment
2. Download the code with git : **git clone** <https://github.com/google/googletest.git>
3. Check the directory path inside the directory where we have gtest framework :  
**cd googletest/googletest**  
**pwd**
4. Create environment variable that is pointing to directory where having gtest -framework using command : **export GTEST\_DIR=~<insert\_your\_path\_here>/googletest/googletest**
5. Create a separated folder for testing code : **mkdir test\_dir**
6. Moving testing code inside this folder
7. Moving libgtest.a file inside this folder test\_dir also
8. Moving inside the testing folder that has been created : **cd test\_dir**
9. Compile the testing environment : **g++ -isystem \${GTEST\_DIR}/include -I\${GTEST\_DIR} -pthread -c \${GTEST\_DIR}/src/gtest-all.cc**
10. Compile the testing code : **g++ -isystem \${GTEST\_DIR}/include -pthread unit\_test\_case.c code\_to\_be\_tested.c Gtest\_main.c libgtest.a -o my\_test**
11. Checking the testing result : **./my\_test**